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CLAIMS

1. A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

light entering the anisotropic scattering layer is scattered over a wider angle along the Y-axis direction than along the X-axis direction.

2. A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the

anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and maximum straight-go transmittance is substantially the same in value for both the X-axis direction and the Y-axis direction.

3. A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and maximum straight-go transmittance differs in value between the X-axis direction and the Y-axis direction.

4. A liquid crystal display comprising a first

substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and whose straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is asymmetrical along the X-axis direction about a layer normal to the anisotropic scattering layer and symmetrical along the Y-axis direction.

5. A liquid crystal display as claimed in claim 3 or 4, wherein the straight-go transmittance of the anisotropic scattering layer in oblique directions has a characteristic such that the maximum straight-go transmittance is higher for light rays obliquely incident along the X-axis direction than for light rays obliquely incident along the Y-axis direction.

6. A liquid crystal display as claimed in any one of claims 1 to 4, wherein a scattering layer is provided in addition to the anisotropic scattering layer.

7. A liquid crystal display as claimed in any one of claims 1 to 4, wherein the nematic liquid crystal material has a twist angle that lies within a range of 180° to 260°.

8. A liquid crystal display as claimed in any one of claims 1 to 4, wherein the reflective layer is formed

as a transflective layer, and a backlight is provided on the outside of the first substrate.

9. A liquid crystal display as claimed in any one of claims 1 to 4, wherein a color filter consisting of a plurality of colors is provided on either one of the first and second substrates.

10. A liquid crystal display as claimed in any one of claims 1 to 4, wherein at least one optical compensating element is provided on the second substrate side, and the optical compensating element is constructed using a retardation film or a twisted retardation film or both.

Article 19 Amendment

1. (Amended) A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

light entering the anisotropic scattering layer is scattered over a wider angle along the Y-axis direction than along the X-axis direction.

2. (Amended) A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and whose straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the

anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and maximum straight-go transmittance is substantially the same in value for both the X-axis direction and the Y-axis direction.

3. (Amended) A liquid crystal display comprising a first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and of which the straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is symmetrical about a layer normal to the anisotropic scattering layer for both the X-axis direction and the Y-axis direction, the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction, and maximum straight-go transmittance differs in value between the X-axis direction and the Y-axis direction.

4. (Amended) A liquid crystal display comprising a

first substrate having a reflective layer and a first electrode, a second substrate having a second electrode, and a nematic liquid crystal material with twisted orientation sandwiched between the first and second substrates, wherein

the liquid crystal display includes an anisotropic scattering layer which is provided nearer to a viewing side than to the reflective layer, and whose straight-go transmittance varies depending on the incident angle, and

when the viewing direction of the anisotropic scattering layer is designated as the Y-axis direction, and a direction oriented substantially at right angles to the Y-axis direction is designated as the X-axis direction,

the straight-go transmittance of the anisotropic scattering layer has an incident angle dependence that is asymmetrical along the X-axis direction about a layer normal to the anisotropic scattering layer and symmetrical along the Y-axis direction, and the straight-go transmittance of the anisotropic scattering layer in the direction of the layer normal is lower than the straight-go transmittance thereof in any oblique direction.

5. A liquid crystal display as claimed in claim 3 or 4, wherein the straight-go transmittance of the anisotropic scattering layer in oblique directions has a characteristic such that the maximum straight-go transmittance is higher for light rays obliquely incident along the X-axis direction than for light rays obliquely incident along the Y-axis direction.

6. A liquid crystal display as claimed in any one of claims 1 to 4, wherein a scattering layer is provided in addition to the anisotropic scattering layer.

7. A liquid crystal display as claimed in any one of claims 1 to 4, wherein the nematic liquid crystal material has a twist angle that lies within a range of

180° to 260°.

8. A liquid crystal display as claimed in any one of claims 1 to 4, wherein the reflective layer is formed as a transflective layer, and a backlight is provided on the outside of the first substrate.

9. A liquid crystal display as claimed in any one of claims 1 to 4, wherein a color filter consisting of a plurality of colors is provided on either one of the first and second substrates.

10. A liquid crystal display as claimed in any one of claims 1 to 4, wherein at least one optical compensating element is provided on the second substrate side, and the optical compensating element is constructed using a retardation film or a twisted retardation film or both.

STATEMENT UNDER ARTICLE 19(1)

A feature stating "the straight-go transmittance of the anisotropic scattering layer in the direction of said layer normal is lower than the straight-go transmittance thereof in any oblique direction" has been added to claim 4. This clarifies the difference from the cited reference (JP. 11-119215).